PHILIP S. GREEN
Application No.: 08/709,930
Page 2

Releasably Holding a Surgical Instrument," (Attorney Docket No. 287S-004230) is being filed concurrently herewith under separate cover. This latter application is filed with a Preliminary Amendment adding claims corresponding to the claims of U.S. Patent No. 5,855,583 and without payment of the Application Fee, also to preserve applicant's rights.

IN THE CLAIMS:

Please add claims 138-143 as follows:

--138. A system that allows a user to control a movement of a surgical instrument, wherein the surgical instrument is coupled to a display device that displays an object, comprising:

a mechanism that moves the surgical instrument, said mechanism having an original position;

an input device that receives a command to move the surgical instrument in a desired direction relative to the object displayed by the display device; and,

a controller that receives said command to move the surgical instrument in the desired direction, computes a movement of said mechanism based on said command and the original position of said mechanism so that the surgical instrument moves in the desired direction, and provides output signals to said mechanism to move said mechanism said computed movement to move the surgical instrument in the desired direction commanded by the user.

139. The system as recited in claim 138, wherein said mechanism includes a first linkage arm coupled to the surgical instrument and a first actuator which can rotate said first linkage arm and the surgical instrument in a plane perpendicular to a first z axis, said first actuator being coupled to a liner actuator which can translate said first actuator along an axis parallel with the first z axis.

140. The system as recited in claim 139, wherein said mechanism includes a first actuator sensor that is coupled to said linear actuator and provides a first feedback signal which corresponds to a location of said first actuator on the first z axis, and a second actuator sensor that is coupled to said first actuator for proving a second feedback signal which